

Amendment to the Claims:

1. (Currently Amended) A method for collecting and processing uplink received signal level data and downlink geolocation data over a wireless system, comprising the steps of:

gathering signal strength data of received uplink signals of subscriber mobile units as measured and collected by a cell site, the mobile units being in active communication with the cell site and using an active communications channel of the wireless system;

gathering downlink geolocation data corresponding to the mobile units, the downlink geolocation data measured by the mobile units;

forming data pairs by identifying the gathered geolocation data and the gathered signal strength data corresponding to the same mobile units and by selecting the geolocation data and the measured signal strength data received within sufficiently close temporal proximity to a reference time stamp to identify data from the same mobile unit;
[[and]]

generating a set of data pairs correlating measured signal strength values to specific geographic locations throughout said wireless system[[,]]; and

analyzing said generated set of data pairs to evaluate system performance within said wireless system,

wherein each of the steps are performed without drive testing.

2. (Original) The method of claim 1, wherein: said signal strength data is collected by measuring the signal strength of a signal received by a cell site, from a mobile wireless unit.

3. (Original) The method of claim 1, wherein: said signal strength data is collected by measuring the signal strength of a signal received by a wireless mobile unit, from a cell site.

4. (Cancelled).

5. (Cancelled).

6. (Cancelled).

7. (Original) The method of claim 1, where: said signal strength and said geolocation are gathered in real-time at a common data receiver; and said correlation includes matching said geolocation data with said signal strength data of a mobile unit based upon the receipt of data corresponding to the same mobile unit.

8. (Original) The method of claim 1, further comprising the step of: analyzing said set of data pairs to evaluate the effective RF propagation within said wireless system.

9. (Original) The method of claim 1, further comprising the steps of: identifying the cell site which gathered each signal strength data measurement corresponding to each geolocation within the wireless system; and determining the identified cell site likely to receive a signal from a mobile unit at each identified geolocation within said wireless system.

10. (Original) The method of claim 9, further comprising the step of: redefining the projected distribution of likely server cell sites within said wireless system based upon the determination of identified likely cell sites.

11. (Original) The method of claim 1, further comprising the steps of: gathering drop call incident data from said system; and identifying the geolocation corresponding to said dropped call incidents.

12. (Original) The method of claim 11, further comprising the step of: generating a set of data points correlating drop call incidents with geolocation of occurrence.

13. (Original) The method of claim 12, further comprising the step of: analyzing said drop call geolocation data set to determine an effective implementation for addressing dropped calls.

14. (Original) The method of claim 1, further comprising the steps of: gathering blocked call incident data from said system; and identifying the geolocation corresponding to said blocked call incidents.

15. (Original) The method of claim 14, further comprising the step of: generating a set of data points correlating blocked call incidents with geolocation of occurrence.

16. (Original) The method of claim 15, further comprising the step of: analyzing said blocked call geolocation data set to determine an effective implementation for addressing blocked calls.

17. (Currently Amended) A method for collecting and processing uplink received signal level data and downlink geolocation data over a wireless system, comprising the steps of:

gathering signal strength data of received uplink signals of subscriber mobile units as measured and collected by a cell site, the mobile units being in active communication with the cell site and using an active communications channel of the wireless system;

gathering downlink geolocation data corresponding to the mobile units, the downlink geolocation data being measured by the mobile units;

time stamping said gathered signal strength data and said gathered geolocation data with reference to a common reference time;

identifying geolocation data and signal strength data corresponding to a common mobile unit and gathered within a predetermined time proximity to a common time reference to identify the geolocation of another mobile unit and the specific signal strength gathered from the another mobile unit at said identified geolocation; [[and]]

generating a set of data correlating signal strength values to geographic locations within said wireless system[[,]]; and

analyzing said generated set of data pairs to evaluate system performance within said wireless system,

wherein each of the steps are performed without drive testing.

18. (Currently Amended) Apparatus for collecting and processing uplink received signal level data and downlink geolocation data over a wireless system, comprising:

RF signal measurement equipment at a cell site for measuring and receiving uplink signal strength data of subscriber mobile units in active communication with the cell site using an active communications channel of the wireless system;

geolocation equipment for determining downlink geolocation data corresponding to the mobile units, the downlink geolocation data being measured by the mobile units;

a reference time generator for time stamping the gathered signal strength data and the gathered geolocation data with reference to a common reference time;

storage for combining said signal strength data and said geolocation data; [[and]]

a processor for identifying signal strength data elements corresponding to geolocation data elements and for generating a set of data pairs correlating signal strength values to geographic locations within said wireless system corresponding to the same mobile unit[[],] ; and

a processor for analyzing said generated set of data pairs to evaluate system performance within said wireless system,

wherein the processor identifies signal strength data elements corresponding to geolocation data elements by selecting the geolocation data and the measured signal strength data received within sufficiently close temporal proximity to a reference time stamp to identify data from the same mobile unit, and

wherein each of said equipment, generator, storage and processor are non-mobile signal data collection equipment.